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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHANKAR, VIJAY

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 05/31/2002

20

Please find below and/or attached an Office communication concerning this application or proceeding.

18

Office Action Summary

Application No.

09/155,796

Applicant(s)

YAMAGUCHI, TOMOHISA

Examiner

KIEU-OANH T BUI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-18, 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response for Reconsideration

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2. Applicant's arguments with respect to claims 1-18, and 21-26 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

3. Claims 19-20 are allowed (5th notice).
4. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to suggest a video data distribution method as cited in claim 16 and further comprising the steps of "wherein in the transmission level determining step, when the video data playback device plays back the video data with fast speed, the transmission level is determined in such a manner that the video data with a part of frame data thinned from plural frame data included in the video data is extracted, and when fast playback is not performed, the transmission level is determined in such a manner that the frame data of the video data is not thinned" and "wherein in the data extracting step, when the video data playback device quickly forwards and plays back the video data including plural frame data and voice data, said voice data is deleted from the video data and the number of frame data corresponding to the transmission level is extracted to generate video data, and in the transmitting step, the video data generated by said data extracting step is transmitted" as recited in claims 19-20.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-2, 4-6, 9, 11-12 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Ito et al. (U.S. Patent No. 6,014,693/ or "Ito" hereinafter).

Regarding claims 1, 11 and 18, Ito disclose a video data distribution device (Fig. 5, and col. 2/lines 45-55) which comprises: "a load processing device for processing a load condition of a network or the video data distribution device and a subroutine for monitoring its load statuses," i.e., a network load sensor 17 is monitoring the network load conditions at the video server 1 with measurements achieved (as illustrated in Fig. 5, and col. 7/line 35 to col. 8/line 40); and "a data extractor for extracting an amount of frame data from video data comprising frame data, the amount of extracted frame data corresponding to a load condition processed by said processing device; and a transmitter for transmitting the frame data extracted by the data extractor", i.e., Ito clearly discloses to include a video data assembler for extracting data based on the load conditions (Fig. 5, and col. 3/line 43 to col. 4/line 8) in Ito's system for delivering

compressed stored video data by adjusting the transfer bit rate to compensate for high network load (col. 2/lines 45-55) with the use of a network sensor for detecting the network load conditions and a video data delivery unit 15 transmit the extracted data from the video data assembler 14 to client 2 (Fig. 5).

As for claims 11 and 18, Ito discloses the steps of “a load measuring device for measuring a load condition of a network or the video data distribution system”, i.e., a network load sensor 17 is monitoring the network load conditions at the video server 1 with measurements achieved (Fig. 5, item 17) and “a video data playback device for receiving the frame data transmitted from the transmitter of said video data distribution device via said network and playing back the received frame data”, i.e., client 2 can request and receive and replay the requested video frame data (col. 2/line 60 to col. 3/line 10).

As for claim 2, in view of claim 1 above, the step of “wherein based on the load condition processed by said processing device, the data extractor extracts all of the frame data comprised within the video data when the load is low, and extracts a part of the frame data comprised within the video data when the load is high” is disclosed by Ito as Ito discloses that when the load is high as the reference value reaches the maximum, the system will transmit only a part of the frame data, if the reference value is lower, all of the frame data such as all the I and P frames can be transmitted (see Figs. 3 & 4, and col. 6/lines 28 to col. 7/lines 26).

As for claim 4, in addition to claim 1 above, the step of “wherein the video data comprises intra-frame compressed frame data and inter-frame compressed frame data, the data extractor extracts the video data with inter-frame compressed frame data deleted therefrom from the video data having intra-frame compressed frame data and inter-frame compressed frame data based on load condition processed by the load processing device, and the transmitter transmits the video data extracted by the data extractor”, i.e., when the load is high as the reference value reaches the maximum, the system will transmit only a part of the frame data, if the reference

value is lower, all of the frame data such as all the I and P frames can be transmitted (see Figs. 3 & 4, and col. 6/lines 28 to col. 7/lines 26). In addition to claim 4, Ito clearly discloses “a video data assembler for extracting data based on the load conditions” (Fig. 5, and col. 3/line 43 to col. 4/line 8) in Ito’s system for delivering compressed stored video data by adjusting the transfer bit rate to compensate for high network load (Abstract) with the use of a network sensor for detecting the network load conditions.

As for claim 5, Ito further discloses “wherein the video data is MPEG data” (Fig. 3, and col. 5/lines 50-62).

As for claim 6, similar to claim 4 above, the step of “wherein the MPEG data comprises I pictures and P pictures, and the data extractor generates the MPEG data with P picture deleted therefrom in accordance with the load condition processed by the load processing device” is taught by Ito as Ito shows when the load is high as the reference value reaches the maximum, the system will transmit only a part of the frame data, if the reference value is lower, all of the frame data such as all the I and P frames can be transmitted (see Figs. 3 & 4, and col. 6/lines 28 to col. 7/lines 26). In addition to claim 6, Ito clearly discloses to include a video data assembler for extracting data based on the load conditions (Fig. 5, and col. 3/line 43 to col. 4/line 8) in Ito’s system for delivering compressed stored video data by adjusting the transfer bit rate to compensate for high network load (Abstract) with the use of a network sensor for detecting the network load conditions.

Concerning claim 9, in further view of claim 6 above, Ito further show “wherein the MPEG data comprises a plurality of I pictures, and the data extractor extracts plural I pictures from MPEG data having plural I pictures at intervals corresponding to the load condition processed by the load processing device”, i.e, when the load is high as the reference value reaches the maximum, the system will transmit only a part of the frame data, if the reference

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value is lower, all of the frame data such as all the I and P frames, which including a plurality of I pictures therein, can be transmitted (see Figs. 3 & 4, and col. 6/lines 28 to col. 7/lines 26).

As for claim 12, Ito shows “wherein the load measuring unit measures a load of a processor for controlling operation of the video data playback device”, i.e., the network load sensor is provided within the client side for controlling the operation of client video playback device as well (Fig. 8/item 117, and col. 2/lines 60 to col. 3/line 11).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (U.S. Patent No. 6,014,693) in view of Takahashi (U.S. Patent No. 5,739,865).

Regarding claims 3 and 10, Ito does not disclose the thinning process for frame data such that “wherein the data extractor extracts an amount of frame data by thinning frame data from the frame data comprised within the video data based the load condition processed by the load processing device”; however, Takahashi teaches a same technique of thinning out frame data in Takahashi’s image processing system (Fig. 14 and col. 10/lines 30-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ito’s system with a known technique of thinning out frame data in video or image processing system in order to automatically adjust frame data corresponding to its load condition as obtained in the previous process of the load processing. The motivation for doing this is to manipulate frame

data as much as possible for data transmission in avoiding traffic congestions or in controlling the load processing as already discussed in claim 1 above.

9. Claims 7-8, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (U.S. Patent No. 6,014,693) in view of Dixit (U.S. Patent No. 5,260,783).

As for claims 7 and 8, in further view of claim 6 above, Ito does not clearly show the steps of “wherein the MPEG data comprises I pictures and B pictures, and the data extractor generates MPEG data with B picture deleted therefrom from MPEG data having I picture and B picture in accordance with the load condition processed by the load processing device” and “wherein the MPEG data comprises I pictures, P pictures, and B pictures, and the data extractor generates MPEG data with P picture and B picture deleted therefrom from MPEG data having I picture, P picture and B picture in accordance with the load condition processed by the load processing device” with B picture involved; however, those mentioned steps are suggested by Dixit as Dixit shows that intra-frame compressed data I can be detected for extracting by an intra-frame encoder (Dixit, Fig. 2 and col. 2/lines 5-8, and the Examiner’s discussion in claim 6 about the data extractor with the teachings of Ito). Therefore, it would have been obvious to modify Ito’s technique with Dixit’s more details involving B pictures within MPEG data in order to flexibility generating MPEG data based on the load condition processed by the load processing device as shown by Ito (Fig. 5/item 17) as preferred.

As for claim 14, the step of “wherein the video data playback device transmits a plurality of data transfer requests in which each data transfer request designates a data amount to the video data distribution device, and upon receiving said data transfer requests, the video data distribution device transmits frame data based on the data amount designated by each data transfer request” is suggested by Dixit as Dixit discloses the technique of detecting the video motion, monitoring the data amount, adjusting the rate and also adjusting the amount of output

frame data using the motion detector as well as the network congestion control in handling same task as claimed (Dixit, col. 2/line 1-col. 3/line 29).

Concerning claim 15, Dixit further suggests “wherein the video data playback device transmits a data transfer request in which video data is designated, and upon receiving said data transfer request, the video data distribution device transmits a plurality of packets having a portion of the frame data of said video data at predetermined intervals”, i.e, packets are transmitted under an ATM switch at predetermined intervals by using fixed length codewords for transferring video information (col. 2/line 47 to col. 3/line 28).

10. Claims 13, 16-17 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (U.S. Patent No. 6,014,693) in view of Dixit (U.S. Patent No. 5,260,783) and Katseff (U.S. Patent No. 5, 822,537).

Regarding claim 13, Ito does not disclose a VCR herein; however, Katseff shows that the system can be connected to a VCR and recording media (etc.) in the network (Katseff, Fig. 3/items 325 & 330) which suggests more than one VCR can be utilized same as the step of “wherein a plurality of video data playback devices are connected to the network” and the step of “frame data transmitted from the transmitter of the video data distribution device via said network is received by each of said plurality of video data playback devices” are suggested by Katseff as Katseff reveals that his system is a multimedia information retrieval system which connected to either a LAN or WAN (col. 3/lines 58-67) that allows to be accessed and shared by a plurality of users as well as with a plurality of file servers for distributing multimedia files (col. 4/line 65-col. 5/line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ito’s system with Katseff’s teaching technique in using a VCR and connected to the network in order to expand the communication among playback devices on the network level as preferred.

Regarding claim 16, in view of claim 1 above, the combination of Katseff and Dixit teaches a video data distribution method (Katseff, Figs 1 & 3) which comprises: "transmission level determining step of determining a transmission level in accordance with a load of a video data distribution system" (Katseff, Fig. 10 and col. 15/lines 1-65); "a data extracting step of extracting an amount of frame data from video data comprising frame data corresponding to the transmission level determined by said transmission level determining step" (see Examiner's discussion in claim 1 above); "and a transmitting step of transmitting the frame data extracted by said data extracting step, said extracting step and said transmitting step being performed within a video data distribution device" (Dixit, Fig. 2, and col. 4/line 56-col. 6/line 40). In addition to claim 16, Ito clearly discloses "a video data assembler for extracting data based on the load conditions" (Fig. 5, and col. 3/line 43 to col. 4/line 8) in Ito's system for delivering compressed stored video data by adjusting the transfer bit rate to compensate for high network load (Abstract) with the use of a network sensor for detecting the network load conditions.

As for claim 17, this claim is rejected in the scope of claims 12 and 16 as already discussed above.

Regarding claims 21-26, these claims for the steps of "wherein the load processing device processes a load condition of a network by measuring a degree of congestion of network"; and further steps including "which is transmitted from a video playback device", "the data extractor extracts a reduced number of frames of the frame data comprised within the video data", about "P pictures and B pictures", "the load measuring unit is contained within the video distribution device or with the video playback device" and "the video playback device transmits the measurement result of the load measuring unit to the video data distribution device" are rejected in the scope of claims 1-2, 4-9 and 11-16 as already disclosed in details above.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action (with respect to the Amendment in Paper no. 16, received 10/02/01). Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park IV, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

13.. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday- Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui
Art Unit 2611
May 20, 2002

~~TECHNOLOGY CENTER 2600
SUPERVISORY PATENT EXAMINER
ANDREW FAILE~~



ANDREW FAILE
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